

Achieving a Balance

Four Challenges

for Canada in the Next Decade

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Responding to potential health threats posed by environmental contaminants

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Conserving the natural environment

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National Round Table
on the Environment
and the Economy



Table ronde nationale
sur l'environnement
et l'économie

The National Round Table on the Environment and the Economy (NRTEE) is pleased to present this statement as a contribution to stimulating discussion of challenges and opportunities that will likely become important to Canada over the next decade.

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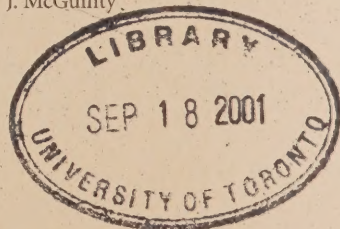
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Introduction

For much of the past decade Canada has been rated as one of the best countries to live in by conventional measures of longevity, knowledge and living standards. But these are highly unusual times. Consider the extraordinary acceleration of technology, the economy, and globalization. Consider also the expanding hole in the ozone layer, the confirmation of dioxins in Arctic mothers' milk, and recurring smog alerts in the Great Lakes region. Our privileged rating, based on a healthy population and strong economy amidst plentiful natural spaces, has so far proved resilient despite tumultuous change. But for how much longer, and with what effort?

The National Round Table on the Environment and the Economy (NRTEE) has identified four emerging challenges to Canada's medium-term prospects. Although these issues are neither broadly understood nor priorities at this time, they will likely become very important over the next decade. Discussion of these four challenges is based on two underlying convictions.

The first is that in recent years the environment has not received the attention it deserves. Governments have been preoccupied with economic matters, particularly reducing the deficit and controlling the debt. Government-sponsored monitoring of environmental changes, for example, has significantly decreased. As a result of fewer resources being allocated by government, we are less able to track and deal with existing environmental challenges and to predict new ones, as the recent contaminated water tragedy in Walkerton, Ontario, illustrates.

The second conviction is that our quality of life is and increasingly will be linked to the quality of our environment, and that our economy cannot prosper in the absence of a healthy environment. In fact, taking care of the environment is an investment in the economy.

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Responding to potential health threats posed by environmental contaminants

Canadians are worried that environmental hazards are affecting the health of children (Ekos poll, September 2000: 93 percent). In the past quarter century, asthma has increased fourfold and is now the most common chronic illness in Canada. There has been a 25 percent increase in the incidence of childhood cancers. Allergies among children have also risen dramatically.

For several decades, governments have controlled the health risk of chemicals by examining substances one at a time and determining safe thresholds of exposure. The latest concern is over the effects of combinations of chemicals, ranging from pesticides to harmful air emissions to food additives. Individually, these chemicals may be at levels that pose no evident harm. In combination they may be unhealthy, particularly for children, whose bodies, brains, and immune systems are less developed and more vulnerable to contaminants.

Researchers now suspect that accumulated pollution and low-level exposure to several pollutants at once (also known as 'total pollutant loads') have interactive and cumulative impacts on human health. Exposure may fall short of causing death or hospital admission, but still may affect large numbers of people. Ongoing exposure to low levels of pollution may result in permanent harm to healthy human function.

Immunological and neurological systems are particularly vulnerable in the unborn, young children, and the elderly. Impaired neurological function can cause learning disabilities and diminished intellectual capacity, while weakened immune systems make us more vulnerable to all disease.

We do not yet fully understand the impacts of individual toxic substances on human health, but we already face the additional complexities of trying to understand their cumulative and interactive impacts. Canada's standard-setting processes have not yet properly taken combined impacts into account.

Some scientists believe we need to radically change the way we think about managing these substances. We cannot wait for an entire generation of affected children to prove the worst expectations. Improving the environment to protect our children's physical health and intellectual capacity is not only a pragmatic precaution but a clear investment in our society and economy.

Our longevity and quality of life may depend on the development of comprehensive and coordinated research efforts to better understand the effects of total pollutant loads and a revamped regulatory approach to implement our new knowledge.

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Canada is home to 25 percent of the world's remaining 'frontier' of intact forests, 25 percent of global wetlands, and the biggest caribou herds on the planet. In extraordinary numbers Canadians enjoy nature, spending more than \$12 billion annually on such activities as bird watching, hiking, and canoeing. Nature's riches offer us clean air and water and economic opportunities. They also give us special stewardship responsibilities on behalf of all humanity.

"What may begin on the surface as a concern for endangered species, leads inevitably to understanding the importance of saving spaces or habitats, which leads to maintaining the health of ecological processes underlying spaces and habitats, which leads to peering into the lifestyles, economic systems and souls of people alive on Earth today."

Monte Hummel, World Wildlife Fund Canada, in his presentation to the NRTEE February 2000

Pressure on Canadian wilderness has grown at an unprecedented rate. Wildlife habitat, for example, is increasingly fragmented by industrial development, roads, agriculture, and urban development, making it difficult to maintain viable populations of grizzly bears and wolves. Mostly because of habitat loss, 340 species are at risk of extinction in Canada, and that number is growing.

Our protected areas such as parks and wildlife reserves are not isolated from these pressures. For example, the ecological integrity of our national parks is increasingly threatened by resource extraction outside park boundaries. Activities such as forestry and mining that take place on adjacent lands have a direct impact on protected areas. Furthermore, conservation biologists tell us that isolated parks are not enough. In addition to small protected areas, new integrated systems of land management are

needed. An example of this approach is the Yellowstone to Yukon initiative to establish an interconnected network of protected areas and wilderness corridors throughout the Rocky Mountains, which are home to the largest populations of grizzly bears in the world. We need to designate core protected areas, adjacent buffer zones, and outlying multi-use zones in ways that balance the need for resources, livelihoods of inhabitants, and the integrity of ecosystems.

Although governments in Canada have been working for the past decade to establish a network of protected areas across the country, with protection of at least 12 percent of Canada's land base as the primary goal, success has been limited. Only British Columbia met this target by the year 2000.

It is clear now that the protection of nature cannot be delivered exclusively through government-owned lands. An integrated approach is called for, recognizing that important ecosystems often exist on private land, sometimes in close proximity to urban areas. Private transfers of land to conservation trusts and conservation easements are highly effective examples of voluntary measures that can be pursued. Integrated approaches must include partnerships with resource industries, Aboriginal peoples, and rural communities, creating new opportunities for them to work towards habitat conservation while sustaining their livelihoods.

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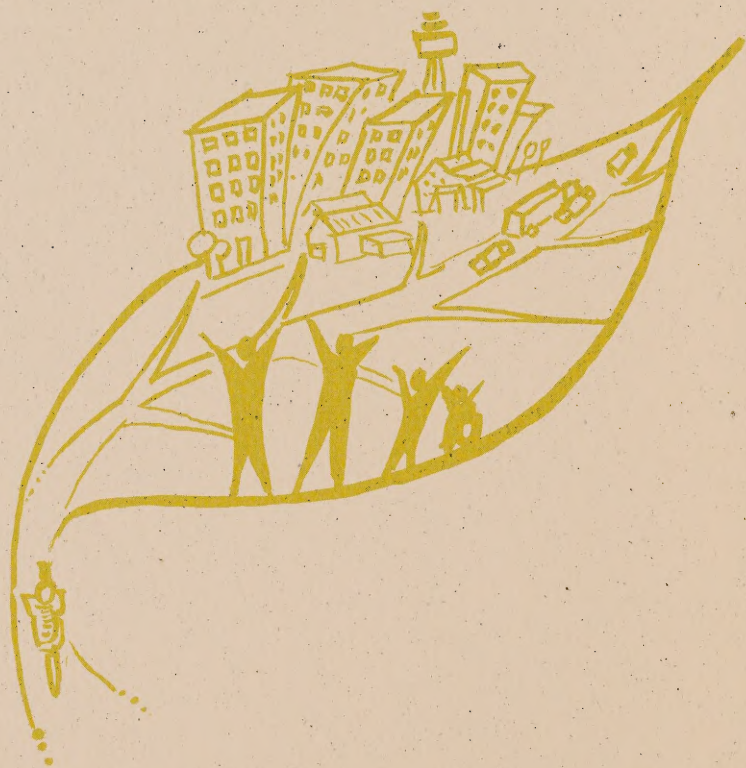
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Although we live in an increasingly globalized society, local communities—the places where we work, live, and play—remain our most important sources of identity. The place we call community is also overwhelmingly urban. Within 10 years, 80 percent of Canada's population will live in cities, and 90 percent will live within a few hours' drive of the U.S. border.

Rapid urbanization has already led to a host of environmental problems such as poor air quality and loss of green space. Bad planning and design criteria have resulted in urban sprawl, inadequate infrastructure, contaminated sites, and loss of buildings with heritage or historical value. Often, the adverse effects fall disproportionately upon poor, elderly, Aboriginal, and young people.

Far-flung suburbs also have their hidden costs. They increase dependence on personal vehicles and extended road systems, leading to longer travel times, greater congestion, air pollution, and a worsening of the climate change problem.

To truly offer clean air, clean water, and access to nature, cities need to adopt better planning in which city officials and political leaders work with the community to promote public transit, urban revitalization, and the protection of urban green spaces. Using such planning has given cities like Portland, Oregon, a competitive edge in attracting new businesses, particularly those in high-tech and knowledge-based industries.

Community commitment to a vision of urban sustainability is essential. So is strong political leadership. In some cases we need to turn traditional urban planning on its head, developing community goals first and then designing the infrastructure of roads, sewers, and parks around those goals. Inner cities too can benefit from rethinking infill opportunities and the recovery of brownfield sites, especially in needy neighbourhoods. We have an important opportunity in the next 10 years to design and retrofit our cities in ways that integrate and maximize social, economic, and environmental benefits.

The federal 2000 budget allocated C\$125 million to municipalities for 'green' investments—a good start, but the federal government should play an even more active role in supporting projects such as public transit and social housing. Cooperation with provincial and municipal governments will be essential.

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In the global economy, knowledge and technology are being substituted for materials. The economic advantage is going to those who provide services and employ new ideas and techniques, not simply new resources. Globalization has also heightened awareness that long-term survival and prosperity are linked to the ability to produce goods without destroying the planet's 'natural capital.' While this trend may be good for the environment, it may pose a significant challenge for Canada, whose economy has traditionally been resource-intensive.

An important element of these changes is increased conversion to a reuse/recycle economy. The Worldwatch Institute notes that 56 percent of the steel produced in the United States now comes from scrap, and the mills are located far from traditional coal and iron sources. In 1997, British Petroleum declared that climate change could no longer be ignored, and began to transform itself from an oil and gas company to a sustainable energy company, beginning with a US\$1 billion investment in solar and wind power research. Alberta's TransAlta Inc. has invested in wind energy as part of a C\$100 million commitment to sustainable development. 3M Corporation's Pollution Prevention Pays program has reduced polluting emissions by more than 750,000 metric tons since 1975 by cleaning up and redesigning processes and products, saving the company more than US\$790 million.

"...(T)he unexpectedly large improvements to be gained by resource productivity offer an entirely new terrain for business invention, growth, and development. Its advantages can also dispel the long-held belief that core business values and environmental responsibility are incompatible or at odds."

Amory Lovins, Presenter to the NRTee, November 1999.

Despite developments such as these, it is not well understood by Canadians that economic growth will depend less and less on resources in the future.

Jobs will be affected by these developments. Training a skilled workforce is going to become imperative for Canada in the next decade. To prepare, we need better tools to gauge our current and future policies and approaches. The National Round Table has embarked on a major effort to develop better indicators of the draw-down of our natural capital, as a complement to conventional measures of economic growth such as GNP. As well, it is pioneering the application of waste and energy minimization measures within firms.

The National Round Table also recommends that more market mechanisms, such as emissions trading systems, be adopted by government, and that fiscal policies be assessed and redesigned to benefit the environment and the economy.

¹ Lovins et al., *Natural Capitalism: Creating the Next Industrial Revolution* (Boston: Little, Brown and Company, 1999), p. 13.

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There is an urgent need for Canada to respond to new indications of subtle but widespread health damage due to the combined effects of environmental contaminants.

Canada must do more to keep its natural environment from disappearing. In addition, we should acknowledge our overwhelmingly urban-dwelling condition and manage our urban living spaces to be healthier environments. Finally, the Canadian economy will need to diversify to weather major changes taking place in the new global economy.

The four problems identified here result from an imbalance in our environment, our economy, and our standard of living, which are all interconnected and subject to rapid change.

Correcting that imbalance and meeting these four challenges involves significantly increasing investments in scientific research and monitoring capacity in order to manage—to understand, track, and predict—environmental change. Not doing so puts our children at risk.

Research and new data can help us find the right course. But there is an even more pressing need for immediate action on the basis of what we know now. Canada either addresses these problems within this new decade or risks its admirable quality of life. All Canadians—in governments, in industry, and in our communities—have a responsibility to become involved in the search for solutions.

The National Round Table assesses the driving engine of change, the economy, and the essential reservoir of our survival, the environment, and how to sustain them both. The Round Table is independent, impartial, and inclusive. Appointed by the Prime Minister, the members are distinguished Canadians representing a wide range of regions and sectors including business, labour, academia, and environmental and Aboriginal organizations. At the heart of their work is a commitment to improve economic and environmental policies by providing decision makers with the information they need to make choices for a sustainable future.

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